

26/6/52.

Dear Dr. Lederberg,

Thank you for your letter of 19th June. I am glad to hear that you are still interested in the L forms. But you are mistaken, for I have been able to verify regeneration from E. Coli B + phages T2 and T3. It occurred in the L form and was then transformed into bacilli. I have cultured L colonies from little white granules that turned up in the filtrates after about three weeks. This happened several times with one batch of broth, but I was not able to repeat it later with different batches of broth. I am convinced that it is dependent on the constitution of the broth, but have not the faintest idea which substances are essential. I am a bit doubtful about Hemophilus pertussis and would have more confidence in work with Salmonella or Coli.

The fusion figures in the K12 strains, I have no doubt, are precursors of L forms. Fusion means flowing together and may not be connected with anything sexual. It may be for protection against some adverse conditions. I have recently observed wonderful fusions in a Micromonospora, occurring (the fusions I mean) in very dry cultures.

I am still very much hoping to come to your laboratory, but I am not planning anything just at the present moment. In regard to a publication of Prof. Tatum and you, I should like you to mention my negative attempt to connect up morphological structures with the occurrence of the prototrophs. I think it should perhaps be mentioned somewhere.

Yours sincerely,

E. Nobel